

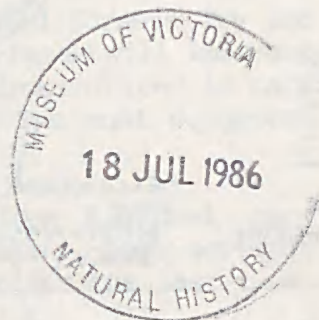
The NORTH QUEENSLAND NATURALIST

CAIRNS

Journal of

NORTH QUEENSLAND NATURALISTS CLUB
Box 991, P.O. CAIRNS, Q. 4870. Australia.
Phone 53 1183

Founder President: The late Dr. HUGO FLECKER
International Library No: AT ISSN 0078 1630



OBJECTS: The furtherance of the study of the various branches of Natural History and the preservation of our heritage of indigenous fauna and flora.

MEETINGS: Second Tuesday of each month at Cairns Education Centre, Cnr. Morehead and Lazarus Sts., Bungalow, 8.00 p.m.

FIELDS DAYS: Sunday before meeting. Notice of place and time given in "Cairns Post".

SUBSCRIPTIONS: (Due September 30th)	
City and Suburban Members	— \$5.00
Country Members	— \$4.00
Pensioner and Junior Members	— \$1.50

CLUB OFFICERS:	
PRESIDENT	— Mr. Les Francis
HON. SECRETARY	— Mrs. Dawn Maggary/Mrs. Joan Chapman
HON. TREASURER	— Mrs. Marie Brutton
HON. EDITOR	— Miss. Ceri Pearce
PATRON	— Mr. S. E. Stephens

54th YEAR No. 185.

JULY, 1986.

CONTENTS.

PAGE

Cyclone Winifred.....	by Sybil Kimmins, Joan Chapman, Ceri Pearce and Andrew Krumins.....	2
The Devastation.....	by Gloria Pearce.....	4
The Life History of the Hercules Moth.....	by Ray Straatman.....	5
A Year Of Refugees.....	by John Squire.....	6
The Frog and the Dragon.....	by Sybil Kimmins.....	7
An Emigrant Gecko.....	by Rupert Russell.....	8
International Council For Bird Protection.....		9
Bird Watching at Georgetown.....	by Jim and Anne Downey.....	10
Little Terns Nesting.....	by Dawn Maggary.....	11
North Queensland Naturalists Club Activities for 1896.....		12

Each author is responsible for the facts and opinions expressed in his or her own article.



CYCLONE WINIFRED

by Sybil Kimmins
Joan Chapman
Ceri Pearce
Andrew Krumins

On February 1st, 1986, Cyclone Winifred with a centre of 952 mb. passed along the North Queensland coast. It crossed the shoreline at approximately 7 p.m. just south of Innisfail. This cyclone proved to have an exceptionally larger diameter than would be expected of a cyclone with the same intensity, travelling along the same path. Wind speeds at Cairns were measured up to 150 km/hr., while at Josephine Falls, gusts of up to 250 km/hr. battered the country side.

On Sunday, February 9th, the North Queensland Naturalist Club explored the cyclone devastated forests south of Cairns. Namely, Babinda Boulders scenic reserve, the Josephine Falls area of Bellender Ker National Park, and along the road to Bramston Beach. We attempted to drive to the Eubanagee Swamp but were prevented from doing so by high flood waters.

In places that were exposed to the full fury of the winds, such as the Josephine Falls area the tops of the trees were sheared off, as with a giant knife. In more sheltered areas, the forest appeared to have been thinned out, most of the damage being the removal of leaves and branches, leaving the trunks bare but standing. Epiphytes still clung to the trees, although Drynarias had lost a lot of fronds. Lack of shade may cause some fern loss and damage the underlying flora.

The slopes leading to the Atherton Tablelands appeared striated as the open ridges were severely wind damaged, while the gullies remained less affected and green.

Small, isolated patches of rainforest in areas of increased human habitation appeared to be more exposed and therefore, more greatly affected by the winds of the cyclone. Many trees were completely uprooted. This was particularly noticeable along river and creek banks in semi-cleared land, where the swollen flood waters were already muddy with soil erosion.

In the Rainforest around the Babinda Boulders Picnic Reserve, the areas affected by Cyclone Winifred were quite random. On the same level of ground, some patches of forest appeared severely damaged, while adjacent areas appeared barely wind swept.

Throughout the day the forest remained fairly silent. There were not many bird calls and even fewer seen. A sighting of fig parrots was the only pleasant relief at Josephine Falls, which must have been the worst affected area we visited. Among the sugar cane and long grass, red-browed crimson and double barred finches flitted around, as did the shy tawny grassbirds. Two male red-backed wrens and their families were also a delightful sight.

Other birds seen during the day included kookaburras, couchals, white cockatoos, graceful honeyeaters and a mistletoe bird.

Hopefully, the areas damaged by Cyclone Winifred will regenerate fairly quickly, although what the long term effects of strong direct sunlight on the now exposed rainforest understory, and what effects the lost and broken trees will have on the overall dynamics of the rainforest is yet to be seen. It is believed that the C.S.I.R.O. are using satellite photos and study reserves in an effort to gauge the extent and effects of the damage caused by the cyclone.

Dry conditions since February, have left the devastated forests dry and fire prone. The excess dry wood and kindling beneath the trees will increase the possibility of this hazard. Fire restrictions are being enforced in many Shires, to hopefully prevent a bushfire from occurring. The most dangerous period will occur during the cane fire season.

It has been noted by some members, that since Cyclone Winifred, many trees appear to be flowering for a second time this season. Some severely damaged trees appear to be making a dying effort to flower for the last time. The most noticeable being the lovely Golden Pinda.

About 30 known Cassowaries in the Mission Beach/Bingil Bay areas, south of Innisfail are being hand fed by locals. The Cassowaries were becoming desperate, only coming closer and closer to inhabited areas in an effort to find food. It may be up to twelve months or more before natural fruits and berries are once again available in the Cassowaries Rainforest habitat.



MUSEUM OF VICTORIA
18 JUL 1986
NATURAL HISTORY
Babinda Boulders
Scenic Reserve.



Josephine Falls
Car Parking Area,
Bellenden Ker National Park.

THE DEVASTATION

Cyclone Winifred your fury has passed
The child you mutilated has breathed her last
How lucky we were no more lives were lost
T'was the land that you slaughtered with such holocaust

You came swooping in on our North Queensland coast
With fury you tore and ripped, I evoke
I've seen the houses you blew away
When you visited us on that fateful day

The ships you did plunder and houses unroof
The trees all uprooted and road signs all stooped
The birds are all hungry, no food left to eat
Only the Cassowary are getting blessed relief

The rainforest mountains in emerald green
Alas, they can no longer be seen
Instead the sun has burnt them all brown
All ready for bushfires to burn them all down

Oh rainforest canopies blown far away
Canopy dwellers where are you to-day
The trees now bare sticks pointing up to the sky
And below them a tangle thats sore to the eye

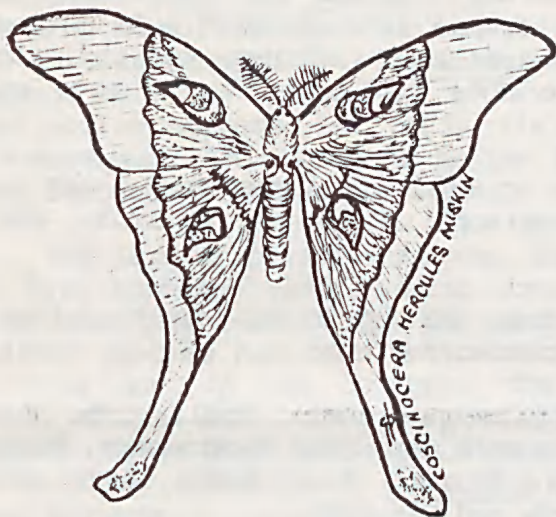
How many years will it take to repair
The damage that Winifred has done to you there
Oh tree covered mountains I shed tears for you
And hope your revival will someday come true

- Gloria Pearce



THE LIFE HISTORY OF THE HERCULES MOTH
(*Coscinocera Hercules*)

by Ray Straatman
Kuranda



This moth, of the Family SATURNIIDAE (Silk Moths), is one of the largest species in the world, and the largest moth of Australia and New Guinea. Its wing span may reach up to 24 cm. in some males, and up to 30 cm. in the largest females. In Australia, its distribution is limited to the rainforest areas along the north east coast and adjacent tablelands.

The moth is easily attracted by light, especially mercury vapour lamps. Males fly rather late, usually well after midnight, but females much earlier.

The life-span is rather short: from about 5 to 8 days in both sexes. They cannot feed as adults, their proboscis being rather short (rudimentary) or absent.

The egg measures 3, 4 mm by 3 mm, has a brown colour and is firmly attached to the surface upon which it is laid, with a sticky substance. The incubation period varies from 13-18 days depending on the local temperatures.

1st Instar larva, at birth about 1 cm long, colour white, with 4 rows of fleshy tubercles having short, stiff hairs at their tip. The larva is covered by a powdery white substance.

The 2nd Instar has its thoracic segments divided laterally with a reddish brown broken line, otherwise is similar to the 1st Instar.

The 3rd and 4th Instars are alike, colour now light green, tubercles stiff, yellow with the dorsal ones being the longest. There is no more trace of the powdery white substance.

Just before its last molt, the larva is between 5 and 7 cms long. By the time it reaches maturity, it may reach a length of 14 cms and 3.5 cm across.

When ready to pupate, the larvae wanders around until it is satisfied that a suitable position is found before starting with the construction of its large cocoon. If a large leaf is chosen, its stem is first firmly attached to the twig or branch from which it grows, by covering its base and the twig with several layers of silk. The larva then pulls in the edges of the leaf as to form a tunnel, while continuously spinning silk. The outer cocoon is rough, but the inside layers are thick and very smooth. It takes the larvae from 8 - 10 days to complete its cocoon, during which time it loses up to 2/5 of its size and body weight.

The pupa is smooth, rounded and it may take from 4 weeks to a year depending on the season and weather conditions, before it emerges as a moth.

Usually the moth emerges from the cocoon in the evening, between 8 - 10 pm. It then hangs suspended from the underside of the cocoon spreading its

large wings. This process takes about 30 minutes. The moth remains in that position throughout the following day until the following evening. The males will then start their flight in search of females.

The female moth, 24 hours after emerging secretes its pheromones, a volatile substance which attracts the males from a long distance. If mating takes place, the pair remain united until the following evening when the male disengages and flies away, and the female does the same, laying eggs on various plants during the night.

There are quite a number of food plants on which the larvae feed, such as *Omalanthus* (or Bleeding Heart), *Annona* (Sauersop), *Ailanthus*, *Avocado*, and others like *Terminalia*.

The male has long tails on the hindwing, the female has its hindwings ending in a blunt, rounded, elongated extension.

Predators : Large numbers of eggs are eaten by ants, small birds and spiders. Small larva are killed and eaten by ants, spiders, cockroaches, bugs (particularly those of family Hemiptera) and birds. Fully grown larva end their immature life when taken by Butcherbirds and Catbirds.

Parasites : Sometimes larvae are parasitised by Tachinid Flies but the main parasite is a large Ichneumonid wasp which has an orange body, up to 5 cm long and metallic blue wings. Pupae die when weather conditions are too dry.

To obtain eggs from a female caught at the light, one keeps it in a large, wooden or cardboard box, spray some water in it and leave for a few days. The female will lay all of its eggs against the sides on the bottom of the box.

—oOo—

A YEAR OF REFUGEES

- John Squire
Kuranda

The most notable feature of birdwatching during 1985 has been the number of birds normally of a more inland or southerly distribution, which have appeared in our area this year. This is presumably in response to exceptionally dry conditions earlier this year and is part of the resulting extensive movements during which many species have been seen hundreds of miles north of their usual ranges right across northern Australia.



Our first signs of anything really unusual came in mid-April when Australian Bustards and Pink-eared Ducks each appeared at several localities, and I saw my first Spotted Harrier of the year. Groups of up to 8 Bustards were then seen commonly, both on the Tablelands and in the drier country, with flocks of up to 45 occasionally: fourteen even turned up at the edge of the rainforest at Kuranda, and one on the Cairns foreshore! Pink-eared Ducks occurred at at least 5 localities, seeming to favour the shallower, marshy wetlands. I saw a total of 13 Spotted Harriers this year, many more than in any previous year; 7 of them, mostly immatures, during a period of less than 5

weeks in August and early September. All 3 of these species continued to be seen for most of the year.

At the end of July, mixed flocks of hundreds of White-browed and Masked Woodswallows were seen to the west, north and east of Mareeba and stayed in this area for at least a month. They were most frequently seen feeding on the flowers of Grevillea pteridifolia which were in blossom at the time. Whilst watching these, one observer spotted a flock of Plum Headed Finches feeding on the grasses beneath the Grevilleas and I saw another flock myself nearer to Kuranda in late September. Also in late July, at least 10 Australian Pratincoles appeared in paddy fields near Mareeba and some stayed until mid-November. This seems to be the first time that many of these species have been recognised so near to Cairns.

The last surprises were when Zebra Finches appeared in late September and Diamond Doves in early October, both near paddy fields to the west of Mareeba. Again, neither species has been noticed so far east previously in this part of the country. The Zebra Finches have taken up at least temporary residence and occasional Diamond Doves have been seen irregularly since: one in as unlikely place as a Casuarina pocket in rainforest near Kuranda.



Yellow-billed Spoonbills have been with us since mid-April, and Red-kneed Dottrell, Red-winged Parrot, and Little Friarbird since at least August. A few of all these species are always seen, particularly during the latter part of the year, but although I have insufficient records to be sure, I feel that all these have also been more numerous than usual. Yellow-billed Spoonbills, for example, were present at at least 5 separate places at the same time in August and Little Friarbirds outnumbered Noisy Friarbirds towards the end of the year, the reverse of the usual situation and by early December some even reached the coast at Cairns, another event which appears not to have been noticed before.



Spotted Harriers, Bustards, Pratincoles and Diamond Doves all seem to have disappeared by, or during, early December, but at the time of writing in January, 1986, Pink-eared Ducks and Zebra Finches at least are still with us.



THE FROG AND THE DRAGON

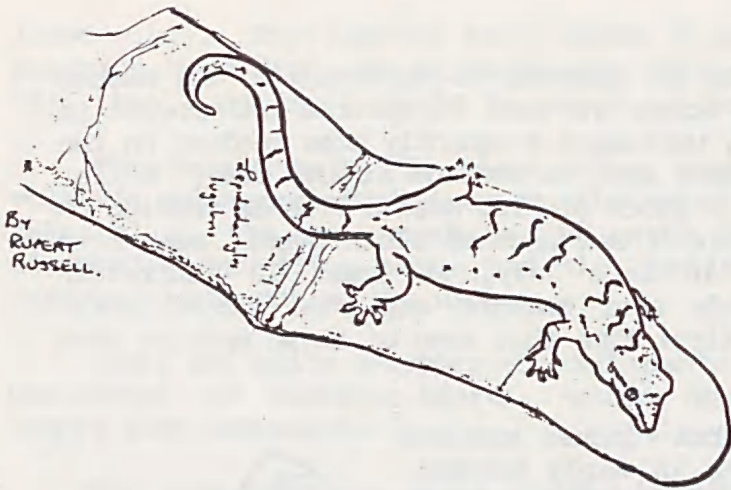
Hi, frog! I sense you're frightened of this roaring, hissing dragon,
I do not blame you; smaller fry go down its quivering throat.

The spiders in the corners and the beetle on its back
Have been consumed with gusto as the thing moves on its track.

I've chased you from behind the pictures hanging on the wall;
Complained about the mess you make -- you really do appall --
And now, dear froggie, I'm afraid you'll think I'm getting meaner,
But I really would NOT put you down my hungry vacuum cleaner!

- Sybil Kimmins.





AN EMMIGRANT GECKO

by Rupert Russell

Geckos of many different shapes and sizes can be found in Australia, living in habitats as various as the rainforest canopy or a clump of porcupine grass in the desert. About 10% of the world's gecko species live in this country (Bustard), with at least one of these arrived as a fairly recent immigrant.

Classified as *LEPIDODACTYLUS LUGUBRIS*, it is widespread in east Asia, New Guinea, oceanic and Torres Straits islands, New Zealand and in a small area of the eastern Australian coastline - Innisfail to Port Douglas. As it has such a limited coastal distribution, and is the only *Lepidodactylus* species on the Australian mainland, thus far, (Cogger), this gecko is thought to be an accidental introduction.

The Lugubris gecko is common in parts of Cairns, and by night observers can enjoy a view of this gecko on many of the buildings fronting the Esplanade. Perhaps it could be named the Seafront gecko, for it is certainly numerous on shoreline vegetation - the first one I saw was in the flower of a Cottonwood (*Hibiscus tiliaceus*). It is a small lizard, not much longer than a finger, and generally a pale shade of grey, cream or yellow. Distinctive markings include a dark streak on the side of the face, and a few scrawled "W" marks along its back. Along each side of the tail runs a ridge or flange, which may function to provide the lizard with the ability to support its weight while moving through foliage. Certainly this gecko often coils its tail quite tightly to one side or another while on the move.

Lugubris, or the Seafront gecko, is one of those which can spend the day abroad rather than needing to seek a dark retreat. In common with other geckos which have this ability, (eg Leaf-tailed Gecko and Spiny-tailed Gecko) it has a heavily camouflaged pupil, which merges with the colour of the head, instead of having the prominence of the huge dark orbs of the more strictly nocturnal geckos such as the Northern Dtella.

The Seafront gecko can be found on leaves, branches, or near blossoms during the day. It seems fully alert, and I believe it would snap up any suitable insect that strayed conveniently close. It is not unlikely that the gecko deliberately stations itself near flowers in order to collect some of the visiting insects, and furthermore, the gecko may itself feed on nectar as part of its diet.

In partial confirmation of this I placed droplets of honey near three geckos at sites along the Esplanade, and two of the three were soon licking the honey. The idea of supplying honey came to me from the book on New Zealand lizards by Sharell, who stated that the presence of honey is detected by its smell.

References: R. Bustard 1970, Australian Lizards.
H. Cogger 1975, (and subsq.) Reptiles & Amphibians of Australia.
R. Sharell 1966, The Tuatara, Lizards and Frogs of New Zealand.

INTERNATIONAL COUNCIL FOR BIRD PROTECTION

The North Queensland Naturalist Club is currently a member of the Australian National Section of this organization.

The ICBP was formed in 1922 and is the oldest extant international conservation organization. It works closely with IUCN and has national sections in some 65 countries; it was responsible for compiling Volume 2: Aves of the Red Data Book and it is engaged in many practical projects to prevent the otherwise likely extinction of particular bird species.

The Australian National Section (ANS) is comprised of active ornithological and natural history societies in Australia. It takes up major bird and habitat issues in our region and lends financial support to the work of ICBP overseas.

A recent example of a good result after years of effort by the ICBP, its member societies, and others, is the Federal Government's decision to legislate to protect the nesting sites of Abbott's Booby from destruction through phosphate mining on Christmas Island. Latest news is that the threat has diminished following a compromise agreement between Australian National Parks and Wildlife Service and the Phosphate Mining Company.

Member societies are kept up to date with world-wide developments in bird conservation through ICBP publications and a two-monthly newsletter. The ANS also puts out a newsletter from time to time.

NOTES ON SOME ACTIVITIES BY THE ANS in the past eighteen months -

1. Correspondence urging the ratification of Torres Strait Treaty and action to improve the status of the Torres Imperial-Pigeon.
2. Correspondence requesting an end to the slaughter of seabirds on North Keeling Island. Despite many letters the responsible Department of Territories has shown great reluctance to act.
3. Correspondence concerning the effect of airstrip construction at the French Antarctic base on an Adelie Penguin colony. Despite many protests and action by the French National Section, the project has continued.
4. Correspondence on the export of rare Caledonian bird species to private collector(s) in France.
5. Correspondence to Customs regarding bird smuggling.
6. Correspondence to counter the media campaign by the Associated Bird Keepers and Traders for the commercialised export of Australian birds. This continues to be a serious threat.
7. Correspondence requesting that the integrity of the Daintree rainforest be retained. It wasn't.
8. Liaison with TRAFFIC (Australia), the IUCN funded body monitoring the international trade in endangered species.





BIRDWATCHING AT GEORGETOWN EASTER 1986

by Jim and Anne Downey

Georgetown is situated approximately 430 kilometres southwest of Cairns. It is a hot and dry area. There are a number of places to birdwatch within walking distance from the township, such as the golf course, the cemetery and along the banks of the Etheridge River.

Travelling west by car on the Croydon Road, approximately 4.5 kilometres from town, there is a dirt track on the left. Follow this through to Durham Dam. Again, travelling west on this same road, approximately 20 to 22 kilometres from town, you will notice a tall chimney on the left. There is a track here which will take you to Cumberland Dam.

From town, travelling south on the Forsayth Road, there is a small pool on the right side, after the fourth grid. Further down approximately 8 kilometres, there is a large dam on the left with a windmill nearby.

About eighty birds were sighted over a period of three days and some of the more interesting sightings were:-

Gouldian Finch, Plum-headed Finch, Spinifex Pigeon, Little Whimbrel, Black-breasted Buzzard and the Variegated Fairy Wren. The full list has been included for perusal.

GEORGETOWN BIRDS

Crested Pigeon
Squatter Pigeon
Diamond Dove
Peaceful Dove
Blue Faced Honeyeater
Yellow Tinted H.E.
Yellow H.E.

Rufous Throated H.E.
Plum Headed Finch
Zebra Finch
Black Throated Finch
Pictorella Finch

Chestnut Breasted Finch
Double Barred Finch
Gouldian Finch - Red Faced
" " - Black Faced
" " - Immature

Variegated Fairy Wren
Weebill

Black Headed Pardalote
Rainbow Bee-Eater
Rufous Songlark
White Winged Triller
Brown Treecreeper
Apostle Bird
Dollar Bird
Black Faced Woodswallow
Black Faced Cuckoo Shrike
Sacred Kingfisher
Brown Flycatcher
Restless Flycatcher



Cockatiel
Budgerigar
Red Tailed Black Cockatoo
Sulphur Crested Cockatoo
Galah
Channel Bill Cuckoo
Brown Gosawk
Black Kite
Whistling Kite
Kestrel
Wedge Tailed Eagle
Collared Sparrowhawk
Pheasant Coucal
Tawny Frogmouth
Grey Butcherbird
Mudlark
Magpie

Great Egret
Little Pied Cormorant
Pied Cormorant
Night Heron - Juvenile
White Faced Heron
Australian Grebe
Coot
Pied Stilt
Masked Plover
White Necked Heron
Little Whimbrel
Grey Teal
Black Duck
Grass Whistling Duck



Little Friarbird
 Noisy Friarbird
 Yellow Throated Miner
 Fairy Martin
 Pale Headed Parrot
 Great Bowerbird

Hardhead
 Darter
 Green Pygmy Geese
 Jacana
 Black Fronted Dottrell
 Royal Spoonbill
 Cattle Egret

Maybe's

Marsh Crake
 Spotted Harrier
 Black Breasted Buzzard

Seen by Others

Grey Goshawk
 Spinifex Pigeon
 Grey Crowned Babbler
 Red Browed Pardalote



LITTLE TERNS NESTING

by Dawn Magarry



Yule Point is some 53 km north of Cairns on the Cook Highway leading to Port Douglas. When the tide is low it is possible to walk through the mangroves on to a large expanse of sand flats. To the north are low dunes backed by a lagoon. It is always a good spot for Beach Stone Curlews and other waders.

On November 30, 1985 we stopped here with Athol Coleman, a visitor from Sydney, to check the birds. We found the Stone Curlews and Athol also pointed out a small group of Little Terns flying and landing on the sand dunes. We inspected the area and found numerous small depressions in the sand usually behind sticks. There were about four pairs of Terns and all in breeding plumage with yellow bills, tipped with black, and bright yellow legs.

On December 17, Arnold and I checked the area again; still just small depressions surrounded by footprints. One bird, pursued by the other was observed carrying a small fish.

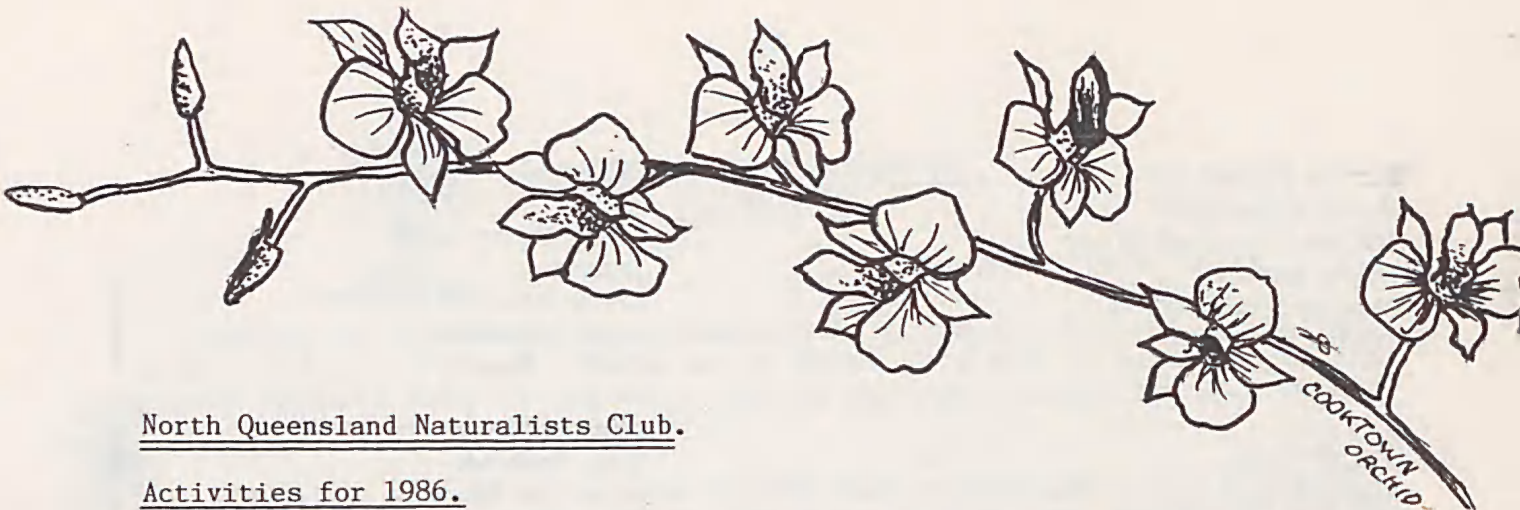
December 28 we again visited the site. As we approached several Terns flew up off the dune. We searched but could find no sign of nests, though the birds flew around overhead calling in an alarmed manner. We decided to retreat on to the flats and when we were about 30 metres away saw two birds alight on the sand.

We carefully noted the two spots and on inspection found one nest with one egg and another with two. The eggs were about one inch long, stone colour with blotches of brown/purple. One Tern was seen to feed another, on the sand, with a small fish. Readers Digest cites this as a courtship habit.

On January 13, 1986 we again checked the nest sites but unfortunately all trace of birds and eggs had gone. This was probably due to a week of 2½ to 3 metre tides plus south-east winds which swept over the nest sites. There were only non-breeding Terns present at the time of our visit.

Discussing the Terns with Ian Cowan, he reported that in company with Alan Graham on January 2, 1980 they found a pair of Little Terns with a chick at Half Moon Bay, Cairns. The adults sat quietly about 30 metres from the nest and only became alarmed when the observers approached closer than 10 metres.





North Queensland Naturalists Club.

Activities for 1986.

JULY.	18/19/20	Fri.-Sun.	(Show Day) Trip to Mt. Garnet Blencoe Falls/Burdekin River.
AUG.	6 Wed. 10 Sun. 12 Tues.	Committee Outing Meeting	C. Pearce; 315 Severin St, Cairns. Boar Pocket Rd./Lake Euramoo. Lyle Squires - Marine Life.
SEPT.	3 Wed. 7 Sun. 9 Tues.	Committee Outing Meeting	A. & D. Maggary; 29 Heavey Cres. Golden Hole & Josephine Falls, Miriwinni.
OCT.	8 Wed. 12 Sun. 14 Tues.	Committee Outing Meeting	L. Francis; 21 Dalziel St, Stratford. Mossman Gorge.
NOV.	5 Wed. 9 Sun. 11 Tues.	Committee Outing Meeting	A. Krumins; 24 Panguna St, Smithfield Heights. Kuranda/Black Mountain Rd./Barron Falls
DEC.	3 Wed. 7 Sun.	Committee Outing	S. Kimmins; 231 Lyons St, Cairns. Botanical Gardens/ BBQ at J. Chapmans, 66Walsh St, Edge Hill.

Meetings are held at the Education Centre, Corner of Morehead St and Lazarus St., Bungalow; Commencing at 8.00PM.

Usual assembly point for outings is the Cairns City Library, Lake St, at 7.30AM.

From the Treasurer.

Just a reminder that subscriptions will soon be due for the year, September 1986-1987.
Please note subscription rates itemised on the front cover.



p570-5
N884
clump